August 15, 2019

Ms. Shoshana M. Lew
Executive Director
Colorado Department of Transportation
2829 W. Howard Pl.
Denver, CO 80204

Dear Ms. Lew:

Thank you for appearing before the Subcommittee on Consumer Protection and Commerce and the Subcommittee on Environment and Climate Change's June 20, 2019 joint hearing entitled, "Driving in Reverse: The Administration's Rollback of Fuel Economy and Clean Car Standards." We appreciate the time and effort you gave as a witness before the Committee on Energy and Commerce.

Pursuant to Rule 3 of the Committee on Energy and Commerce, members are permitted to submit additional questions to the witnesses for their responses, which will be included in the hearing record. Attached are questions directed to you from a member of the Committee. In preparing your answers to these questions, please address your responses to the member who has submitted the questions using the Word document provided with this letter.

To facilitate the publication of the hearing record, please submit your responses to these questions by no later than the close of business on Thursday, August 29, 2019. As previously noted, this transmittal letter and your responses, as well as the responses from the other witnesses appearing at the hearing, will all be included in the hearing record. Your written responses should be transmitted by email in the Word document provided to Chloe Rodriguez, Policy Analyst with the Committee, at Chloe.Rodriguez@mail.house.gov. You do not need to send a paper copy of your responses to the Committee. Using the Word document provided for submitting your responses will also help maintain the proper format for incorporating your answers into the hearing record.

Thank you for your prompt attention to this request. If you need additional information or have other questions, please contact Ms. Rodriguez at (202) 225-2927.

Sincerely,

Frank Pallone, Jr.
Chairman

Attachments

cc: The Honorable Greg Walden
        Ranking Member
        Committee on Energy and Commerce

        The Honorable Jan Schakowsky
        Chairwoman
        Subcommittee on Consumer Protection and Commerce

        The Honorable Paul D. Tonko
        Chairman
        Subcommittee on Environment and Climate Change

        The Honorable Cathy McMorris Rodgers
        Ranking Member
        Subcommittee on Consumer Protection and Commerce

        The Honorable John Shimkus
        Ranking Member
        Subcommittee on Environment and Climate Change

Additional Questions for the Record

Subcommittee on Consumer Protection and Commerce
Subcommittee on Environment and Climate Change
Hearing on
"Driving in Reverse: The Administration's Rollback of Fuel Economy and Clean Car
Standards"
June 20, 2019

Ms. Shoshana M. Lew, Executive Director, Colorado Department of Transportation

The Honorable Frank Pallone (D-NJ)

1. Administrator King testified that finalizing the proposed flatline standard would not create a health concern. Based on your experience, does NHTSA's modeling (through the date of the hearing) corroborate this answer?

Notwithstanding former-Administrator King's testimony, NHTSA's modeling analysis in support of the proposed flatline standard demonstrates that, if finalized, the proposal would result in meaningfully negative health impacts. Specifically, NHTSA's Draft Environmental Impact Statement (DEIS) shows that, by 2050, the preferred alternative (i.e. freezing standards) would increase premature mortality by between 134-299 deaths, as a result of criteria pollutant emissions from U.S. passenger cars and light trucks. This is demonstrated in the table below (4.3.3-1), which was printed in the NHTSA DEIS. Notably, NHTSA did not acknowledge these negative health impacts when claiming, in their draft Regulatory Impact Analysis, that the proposal would save 12,700 lives (see table below). When taken together, NHTSA's modeling shows that the assumed premature mortalities as a result of criteria pollutant emissions could significantly exceed the number of lives saved as a result of mass changes (160). That mass reduction figure, while itself debatable, is the element of NHTSA's safety analysis that is based on the strongest research – the remaining balance being based on the "rebound effect" and indirect assumptions about consumer demand. Thus, the comparison between safety impacts of mass reduction and health impacts of emissions is an important one to consider when weighing costs and benefits of different options from the perspective of health and safety.

Table 4.2.3-1. Nationwide Changes in Health Impacts (cases per year) from Criteria Pollutant Emissions from U.S. Passenger Cars and Light Trucks by Alternative, Direct and Indirect Impacts[a,b]

Year	Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Premature mortality (Krewski et al. 2009)									
2025	0	32	29	29	24	18	17	12	11
2035	0	86	80	75	64	48	35	18	24
2050	0	134	124	116	100	73	53	25	39
Premature mortality (Lepeule et al. 2012)									
2025	0	73	68	66	56	41	38	28	25
2035	0	194	179	169	145	109	78	40	55
2050	0	299	278	260	223	163	120	55	87

Source: NHTSA DEIS, Table 4.3.3-1

Table 11-27 - Change in Safety Parameters from Augural CAFE Standards Baseline
Total Fatalities MY 1977 – 2029, 3% Discount Rate

	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 8
Fatalities								
Mass changes	-160	-147	-143	-173	-152	-73	-12	-30
Sales Impacts	-6180	-5680	-5260	-4280	-3170	-2550	-1030	-1480
Subtotal CAFE Atrb.	-6340	-5830	-5400	-4460	-3330	-2630	-1050	-1520
Rebound effect	-6340	-5960	-5620	-4850	-3610	-3320	-2200	-2170
Total	-12700	-11800	-11000	-9300	-6940	-5950	-3240	-3690

Source: PRIA, Table 11-27

The Honorable Jan Schakowsky (D-IL)

1. The Administration's Safer Affordable Fuel Efficiency Vehicle Rule or SAFE Vehicles Rule assumes that by rolling back clean car standards for new vehicles, owners of older vehicles will drive much, much less. This assumption allowed the Agencies to conclude that people will drive less under the Administration's proposal, which means fewer auto-mobile fatalities. And this assumption accounted for nearly half of the purported lives saved under the Administration's proposal. Is the assumption reasonable, and do the conclusions that follow from it make sense?

   NHTSA endeavored to model how the costs associated with stronger fuel standards could impact consumers' decisions about whether or not to purchase a new car, and thus the rate at which the fleet of cars on the road turns over. Analyzing this relationship further is a good idea, but the execution of the concept within this model does not measure up against common sense.

   *For example, the model assumes that stronger standards depress new car sales and keep more old cars on the road. But they assume that for each new sale deferred, **MANY** old cars stay on the road – which is illogical when considering how consumers behave in the real world. For example, even if a consumer chose to defer one new car purchase, it would not rationally follow that the individual would hold on to multiple old cars.*

   All told, the model assumes that the freeze would take 4 million cars off the road in 2025 (see table below), or 46 million cars when considering a "cumulative measure" (it is not immediately clear from the modeling how these two numbers align, though both appear in the course of regulatory analysis).

   The model then goes on to assume that the additional old cars remaining on the road would drive significantly more than the new cars that would have displaced them – which, again in real world terms, would be the equivalent of arguing that the car owners would be compelled to drive significantly more miles to the grocery store or work on ac-count of deferring a new car purchase.

   *The result of this set of flawed modeling assumptions is to conclude that stronger fuel economy standards would result in **692 BILLION extra miles driven over their lifetime** (Source: NPRM, Table VII-88, copied on subsequent slide, adding the two VMT lines that exclude rebound).*

   It's clear from the administrative record that even many federal experts thought this modeling did not make sense. As noted in the docket, "EPA does not support the use of the CAFE consumer choice and scrappage model for a primary analysis for the NPRM standard setting", though EPA provided multiple suggestions for its future refinement (Email, June 18, 2018).

Table 11-33 - Annual Fleet Size,
CAFE Stan

| CY | Fleet Size (m) | | | | B |
	Baseline	Proposed	Change	Change%	
2017	234	234	0	0.0%	
2018	240	239	0	0.0%	
2019	245	245	0	-0.1%	
2020	250	250	-1	-0.3%	
2021	256	255	-1	-0.5%	
2022	262	261	-2	-0.7%	
2023	269	266	-3	-1.0%	
2024	275	272	-3	-1.2%	
2025	281	277	-4	-1.4%	

Ms. Shoshana M. Lew
Page 7

Table VII-88 – Cumulative Changes in Fleet Size, Usage and Fatalities for MY's 1977-2029 Under CAFE Program

Model Year Standards Through	MY 2021	MY 2022	MY 2023	MY 2024	MY 2025	MY 2026	TOTAL
Cumulative Changes in Fleet Size, Usage and Fatalities Through MY 2029							
Fleet Size (millions)	-31	-28	-38	-48	-46	0	-190
Share LT, CY 2040	45%	45%	45%	45%	45%	45%	N/A
VMT, Fatalities, and Fuel Consumption for MY's 2017-2029							
VMT, with rebound (billion miles)	-222	-149	-200	-236	-219	0	-1,030
VMT, without rebound (billion miles)	-48	-29	-43	-46	-70	0	-235
Fatalities, with rebound	-1,840	-1,160	-1,740	-2,010	-1,880	0	-8,630
Fatalities, without rebound	-420	-175	-452	-442	-666	0	-2,160
Fuel Consumption, with rebound (billion gallons)	20	14	18	23	17	0	91
Fuel Consumption, without rebound (billion gallons)	26	18	23	29	21	0	116
VMT, Fatalities, and Fuel Consumption for MY's 1977-2016							
VMT, with rebound (billion miles)	-76.6	-70.4	-88.0	-115	-91.4	0	-441
VMT, without rebound (billion miles)	-79.3	-72.8	-91.0	-119	-94.5	0	-457
Fatalities, with rebound	-711	-646	-804	-1,060	-829	0	-4,050
Fatalities, without rebound	-737	-669	-832	-1,090	-856	0	-4,180
Fuel Consumption, with rebound (billion gallons)	-3.33	-2.87	-3.58	-4.65	-3.65	0	-18.1
Fuel Consumption, without rebound (billion gallons)	-3.46	-2.98	-3.71	-4.82	-3.78	0	-18.8

Source: PRIA, 1412

2. In the SAFE Vehicles Rule, the Administration invoked the principle of the rebound effect, which asserts that people drive efficient vehicles more because they are cheaper to operate. And more driving means more deaths. The Administration argued that freezing the fuel economy standards would reduce the rebound effect, and in the process made calculations based on a doubling of the rebound effect from number the previous administration applied.

   a. At the hearing, Mr. Wehrum stated, with respect to the rebound effect, that "historically, my office has assumed 10 percent. NHTSA has assumed 20 percent."

Based on your experience and knowledge of USDOT's regulatory history, is this correct?

There is a long, ongoing literature on the appropriate calculation of rebound effect, and the past two rulemakings used a 10% rate for rebound in both the NHTSA modeling analysis as well as the EPA analysis. Prior to that, NHTSA issued a Notice of Proposed Rulemaking for CAFE Standards in 2007 in which the agency (independently of EPA), assumed a 15% rebound rate. NHTSA had used 20% rebound assumptions for earlier rules, prior to 2007.

b. Do you agree that the Trump Administration miscalculated the rebound effect? Could lives be saved by rolling back our clean car standards?

As noted above, there is a long and ongoing literature related to the appropriate calculation of rebound effect, and the 20% rate assumed in the proposed rule is twice the rate assumed by both NHTSA and EPA in the past two rulemakings, and also significantly higher than the 15% assumed in NHTSA's 2007 proposed CAFE rule at the end of the Bush Administration.

Moreover, while it is appropriate to factor rebound effect into CAFE rulemaking analysis, it is also important to recognize the constraints of this modeling technique—and that projections about how much consumers may or may not drive given costs associated with driving is ultimately a matter of consumer choice, not the result of a regulatory requirement. As explained in the analysis for the SAFE rule, the ""rebound effect" predicts consumers will drive more when the cost of driving declines. More stringent CAFE standards reduce vehicle operating costs, and in response, some consumers may choose to drive more. Driving more increases exposure to risks associated with on-road transportation, and this added exposure translates into higher fatalities." (PRIA, 1328). In essence, because of the correlation between vehicle miles traveled (VMT) and crashes, modeled rebound also shows more crash fatalities, along with emissions from added VMT. Nevertheless, the agencies' analysis goes on to stress that "nothing in the higher CAFE standards compels consumers to drive additional miles. If consumers choose to do so, they are making a decision…" (PRIA, 1329).